
DevOps Engineer

Job Description

Reports to: Head of Technical Infrastructure

Company Core Values

At Widgit, we're proud to be a purpose-driven software company and Certified B Corporation. Putting people before profit, we're committed to making a positive difference both to the communities we serve and the planet.

Our core values of integrity, kindness and quality shape everything we do. Whether we're designing symbol-supported resources, supporting schools, or working together as a team, we expect everyone to reflect these values in their day-to-day work.

Being a B Corp means we believe business should be a force for good. We want our work to have a lasting, positive impact, not just for those we work with now, but for future generations too. That's why we aim to operate with care, respect, and consideration for others, in everything we do.

We ask all team members to bring a positive, thoughtful attitude to their work, both inside and outside the office, so we may continue to grow a culture we're proud of and make a real difference through our products and practices.

Job Purpose

The DevOps Engineer will be responsible for designing, implementing, and maintaining robust, scalable cloud infrastructure for Widgit's SaaS applications, with initial focus on improving reliability and scalability of the existing Widgit Online platform. This will then be followed by architecting and deploying the next-generation technology ('Yonder').

Working with Development, Product and QA in an agile team to deliver a roadmap of features for a new platform of services, this role will ensure reliable service delivery during peak periods, maintain high performance and security, optimise AWS costs, and establish infrastructure-as-code practices that support the company's growth.

Main Duties

Product Development

- **Managing the AWS workload:** Prioritising and managing tasks generated by product development.
- **Member of the agile team:** Taking part in Sprint ceremonies, daily stand-ups, product design, and review sessions.
- **Sprint work tracking:** Tracking infrastructure work as Jira tickets, consistent with development work management.

Development

- **Working with Development/QA team:** Joining weekly design and architecture meetings to influence decisions with infrastructure knowledge.
- **Working with QA:** Automating testing as part of deployment pipelines.
- **Monitoring and leading on live issue resolutions:** Leading on the monitoring of live systems, organising responses when issues arise.

Infrastructure Management

- **Widgit Online infrastructure:** Auditing, documenting, and improving reliability of the existing Widgit Online infrastructure, investigating and resolving load bottlenecks.
- **Infrastructure as code:** Managing all new infrastructure using Terraform, maintaining configurations in version control and creating reusable modules.
- **Multi-service maintenance:** Maintaining infrastructure for all services including Widgit Online, Yonder, API services, and supporting infrastructure.
- **Deployment pipelines:** Reviewing, validating, and updating deployment pipelines, facilitating zero-downtime deployments and automating across environments where possible.
- **Container management:** Reviewing and maintaining containerised services, ensuring best practices are followed.

Platform Development

- **Yonder infrastructure:** Designing and implementing scalable infrastructure for Yonder, setting up Terraform configurations, ensuring auto-scaling capabilities, and configuring S3 storage.
- **Database management:** Ensuring proper backup procedures and performance tuning for relational databases.
- **System integration:** Maintaining integrations with external services.

Security and Operations

- **Security best practices:** Implementing and maintaining security best practices across the stack, reviewing penetration testing results, maintaining Cloudflare configuration, and ensuring encryption and access controls.
- **Cost management:** Tracking AWS spend, reviewing expensive services, and identifying cost optimisation opportunities.
- **Performance optimisation:** Maintaining change logs, optimising performance, tuning caching strategies, and conducting load testing before peak periods.
- **Backup and disaster recovery:** Ensuring backup procedures are in place, maintaining contingency planning, and managing data retention policies.

Monitoring and Reliability

- **Alerting and monitoring:** Maintaining alerts and monitoring systems, ensuring proactive issue detection.
- **Incident response:** Responding to infrastructure issues, leading post-mortem reviews, and maintaining uptime statistics.
- **Knowledge sharing:** Upskilling team members in DevOps practices, document processes, and procedures.

Team Collaboration

- **Working with Technical Infrastructure team:** Collaborating with the Systems Administrator, providing guidance on DevOps practices, and reviewing Terraform configurations.
- **Proactive communication:** Maintaining regular communication with team heads (HoSD, HoTI, Product) to keep stakeholders informed of progress, blockers, and strategic infrastructure decisions.

Person Specification

Skills and knowledge

Essential

- **AWS expertise:** Auto-scaling, EC2, ELB, S3, RDS, VPC, ECS and Fargate, pricing structures, best practice.
- **Infrastructure-as-code:** Ideally Terraform.
- **Networking and CDN:** Cloudflare, VPC design, load balancers.
- **Containerisation:** Docker best practices.
- **Deployment:** Best practice deployment pipelines.
- **Relational databases:** Aurora (MySQL and PostgreSQL), performance tuning, and optimisation.
- **Caching:** Elastic cache options including Redis.
- **Regional Deployment:** Multi-region deployments
- **Linux System Administration:** Ubuntu/Linux server management, monitoring, troubleshooting, security hardening.

Desirable

- **Windows server experience**
- **Mixed-platform deployment**
- **Automated testing**
- **Ruby on Rails deployments**
- **Background job processing (Sidekiq/Redis)**